Academic Writing at the Graduate Level: Improving the Curriculum through Faculty Collaboration

Mary A. Bair Ph.D.
Grand Valley State University, bairma@gvsu.edu

Cynthia E. Mader Ph.D.
Grand Valley State University, maderc@gvsu.edu

Follow this and additional works at: http://ro.uow.edu.au/jutlp

Recommended Citation
Bair, Mary A. Ph.D. and Mader, Cynthia E. Ph.D., Academic Writing at the Graduate Level: Improving the Curriculum through Faculty Collaboration, Journal of University Teaching & Learning Practice, 10(1), 2013.
Available at:http://ro.uow.edu.au/jutlp/vol10/iss1/4
Academic Writing at the Graduate Level: Improving the Curriculum through Faculty Collaboration

Abstract
This article describes a collaborative self-study undertaken to identify the source of academic writing difficulties among graduate students and find ways to address them. Ten faculty members in a college of education came together to define the problem and to analyze data gleaned from faculty and student surveys, course documents, course assignments, and course assessments. We found discrepancies between faculty and student perceptions about graduate preparation for academic writing and between the espoused and enacted curriculum. Both faculty and students identified problems associated with synthesizing theory and research. We discuss the need for teacher-scholars in today’s educational environment, the challenges facing curriculum improvement, and several program-specific measures being undertaken to address identified gaps in academic writing and critical thinking.

Keywords
Academic Writing, Self-Study, Teacher Education, Graduate Students, Research Skills, Curriculum Development, Program Evaluation

This journal article is available in Journal of University Teaching & Learning Practice: http://ro.uow.edu.au/jutlp/vol10/iss1/4
Introduction

Structurally, conceptually and operationally, the master’s degree in education resists easy definition. Depending on the educational institution, the degree can include one year or more of study, and require various credit configurations. Its purpose can include advanced knowledge, improved skills, professional licensure, doctoral preparation, career advancement or all of these. Typical curricular fare includes courses in the specialty field and in research and inquiry. Additional experiences vary, and may include internships, practica, comprehensive examinations and research theses or projects (Council of Graduate Schools 2007; Glazer-Raymo 2005).

In the United States, approximately one of every four master’s degrees is earned in education (Glazer-Raymo 2005). The largest population that undertakes master’s-level study in education is in-service teachers who are already certified and employed in their field. Their purpose may be any or all of those already mentioned, but most frequently it is to enhance their current status as classroom teachers or to prepare themselves for a different role within a school system. Only a small percentage of master’s degree holders in education go on to doctoral study (Selke 2001).

Literature Review

Academic vs. professional purposes

In view of this multiplicity of purposes, it is perhaps inevitable that the master’s degree in education reflects the tensions that can arise when trying to align professional purposes with academic objectives. Chief among these tensions are the real or perceived dichotomies between theory and practice, and between scholar and practitioner. These tensions play out most visibly in the area of research expectations and whether, for example, the degree should prepare students to be consumers of research, producers of research or both (Moulding & Hadley 2010; Selke 2001; Wilson 2006).

Glazer-Raymo (2005) notes the growth of fully professionalised, practitioner master’s degrees – especially in the fields of accounting, business, education, engineering and public administration – and attributes this trend to globalisation, privatisation, accountability, and demographic changes in the graduate student population. In education, the accountability movement has undoubtedly reinforced the need for school-based best practices. In the United States, the focus of No Child Left Behind (NCLB) legislation on demonstrated outcomes in the form of test scores and annual yearly progress has spawned an era of educational reform that has led, in some cases, to an over-emphasis on the technical aspects of teaching (McMillen, Garcia & Bolin 2010). It may also have exacerbated a belief on the part of some graduate students that research and theory are not directly relevant to their daily practice in K-12 schools (Emmons et al. 2009). When asked to rank the importance of various types of research skills, stakeholders such as college instructors, students, teachers and administrators ranked the formal thesis among the lowest (Ravid 1997). This ranking aligns with teacher preferences for research that is conveyed in personal rather than academic formats; for example, a veteran teacher sharing successful strategies (Landrum, Cook, Tankersley & Fitzgerald 2007). In response to these trends, along with teachers’ desire to improve their practice, the research component in the practitioner master’s degree often takes the form of action research carried out by educators in their own classrooms and school settings (Selke 2001).
**Critical thinking and academic writing**

Nevertheless, an understanding of formal educational theory and research has long been considered central to advanced study and professional improvement. According to this viewpoint, if education professionals are seeking to master their field, they should be able to synthesise research, critique it, and apply it to their profession, and they should be able to demonstrate their understanding by completing a thesis or project that is grounded in theory and research (Selke 2001). Noting that professional development occurs best when educators hold their practice up to the light of research and scholarly work, Daly, Pachler and Lambert (2004, p101) suggest that the trend toward emphasising reflection over research “all too often remains self-referential and devoid of such underpinnings”.

Regardless of whether a master’s degree hews more toward scholarship and thesis or toward best practices and action research, both aim to develop critical-thinking skills. Indeed, even accountability measures such as NCLB often require that schools use “evidence-based” practices. At minimum, these call for teachers to use critical thinking and research-based skills in judging their own practice and determining the validity of commercial intervention programs (Emmons et al. 2009).

Writing is an essential component in both developing and demonstrating critical-thinking skills, and has been called “the exterior sign of an interior thinking process” (Bean 1996, p20). Elder and Paul (2006, p38) point out the “intimate connection between the ability to write well and the ability to think well.” In developing critical-thinking skills, “teaching thesis-based analytical and argumentative writing means teaching the thinking process that underlies academic inquiry” (Bean 1996, p1).

The National Commission on Writing in America’s Schools and Colleges (College Board 2004, p3) warns that, in a knowledge-based economy, “people who cannot write and communicate clearly will not be hired, and if already working, are unlikely to last long enough to be considered for promotion.” Writing, it notes, “is not a frill for the few but a necessity for the many” (College Board 2004, p11). Writing is especially important in the preparation of teachers, who are held accountable for improving the writing skills of K-12 students (Abbate-Vaughn 2007b). In fact, the National Commission has called for a writing revolution in America’s colleges and universities, exhorting them “to improve teacher preparation and make writing more central to their programs of study” (College Board 2003, p27).

**Student preparation**

While considerable research has focused on academic writing at the undergraduate level and dissertation writing at the doctoral level, several researchers have noted the lack of research on academic writing at the master’s level. For example, Lavelle and Bushrow (2007) point out that “little is known about what graduate students think about writing or about what they do when faced with academic writing tasks” (p816). Likewise, Singleton-Jackson and Lumsden (2009) note a “marked paucity in the research literature” on the writing proficiency of graduate students. More recently, Fergie, Beeke, McKenna and Crème (2011) have observed that “much research into writing in higher education has taken undergraduate work as its subject, with rather less focus on postgraduate writing, although Ph.D. writers have attracted increasing attention more recently” (p237).
Especially lacking is research on the academic writing of in-service teachers who are enrolled in master’s programs (Abbate-Vaughn 2007a). It appears that master’s-level instructors assume that graduate students already possess writing skills (Mullen 2006; Singleton-Jackson & Lumsden 2009), and that if they don’t, it is their own fault, or it is somebody else’s responsibility to teach them these skills (Green & Bowser 2002; Gunn, Hearne & Sibthorpe 2011).

This gap in the literature does not mean that academic writing at the graduate level is without problems. On the contrary, it is well known that graduate students find academic writing difficult and stressful, and that they look to university faculty for guidance (Mullen 2006).

At our institution, the majority of faculty have consistently affirmed the importance of our research requirements and have rejected the idea of replacing it with other options such as a comprehensive examination or further coursework. Faculty frequently express concern about the uneven quality of writing demonstrated in students’ projects and theses: “I think that our students are very practical and that this disposition often limits their questioning and critical-thinking skills.” Students, too, are stressed and anxious when confronted with the prospect of writing the literature-review chapter of the project. As one student reported: “I have never written a paper of this magnitude . . . I am absolutely paralyzed by it.”

Despite awareness of the difficulties associated with graduate academic writing, there had been no systematic college-wide effort to examine them. Recognizing this need, a group of instructors came together to identify graduate writing difficulties, their sources and ways to address them.

**Self-Study Methodology**

Self-study methodology determines the focus of the study, but not necessarily the way it is to be carried out (LaBoskey 2004). Our research was self-initiated, self-focused, collaborative, improvement-focused and based upon data gathered from a variety of sources, thus meeting the five principal characteristics of self-study as defined by LaBoskey.

The authors, who share an interest in graduate writing, received a grant from their university’s Faculty Teaching and Learning Center to examine graduate writing in its College of Education, which enrolls over 2,500 graduate students. Eight other faculty volunteers expressed an interest, and a self-study group emerged (Bullough 2001). The two authors and these program-liaison faculty represented each of the core curricular requirements in social foundations and research, as well as seven degree areas: (1) instruction and curriculum, (2) special education, (3) leadership, (4) school counseling, (5) educational technology, (6) higher education and (7) literacy studies. Within the seven degree areas there were 17 emphasis areas. Current degree requirements include 24 credits in the degree’s emphasis area, two core courses of three credits each (one in social foundations and one in research) and a culminating research-based project or thesis.

We felt it was important that each program examine its own ways of approaching writing. Yet, to ensure institution-wide consistency, it was vital that the faculty from the various programs work together. Therefore, we adopted a collaborative self-study methodology (Samaras & Freese 2006). Although our primary goal was to examine and improve our own instruction, we hope that our findings might contribute to the scant literature on graduate writing and that this knowledge might improve teacher-education practices. 
Data Collection and Analyses

The research design for this study was emergent. Data collection and analysis occurred simultaneously, with initial analyses guiding subsequent data-gathering. To enhance credibility, we triangulated data from meeting transcripts; curriculum documents such as course syllabi; description of written assignments and common assessments; and faculty and student surveys.

We believed that we first needed to “raise consciousness . . . uncover the tacit knowledge . . . and develop a shared vocabulary for discussing writing” (Russell 2003, p. vii). Over the course of one calendar year, the 10 participants held seven meetings of two hours each. The transcripts of these conversations were the first source of data. Each meeting was guided by a broad topic. Themes that emerged from the discussion guided subsequent data collection. For example, while our first meeting focused on the role of writing in our programs, we quickly recognised the need to clarify definitions. During our second meeting we generated working definitions to capture the types of writing that were occurring in the college.

Program liaisons collectively generated a taxonomic system to define and distinguish three broad categories of written assignments in their programs:

- **Academic writing** applied reason to advance an argument or position; was written for an informed audience; and was grounded in primary sources and scholarly literature.

- **Professional writing** applied knowledge to strategies or procedures; was written for a professional audience; and could be grounded in secondary sources and professional literature.

- **Informal writing** reflected one’s opinions or beliefs, and was grounded in the writer's own knowledge and experience or that of others.

Faculty used the definitions to classify the types of written assignments. We displayed the assignments in a curriculum map. We also categorised the types of writing in approximately 100 common assessments (i.e., those that are required of all students in each course regardless of instructor or course section).

Later, as we were discussing strengths and weaknesses in student writing, one of the participants asked us whether other faculty in the college were also concerned about the quality of student writing. Although we had anecdotal information regarding faculty concerns we saw the need to systematically document the perceptions of other faculty. While this information could have been obtained through interviews or focus groups, we felt that it would more efficient, quick and reliable to survey all those teaching graduate courses. We felt that asking standardised questions would enable us to see patterns within programs, generalise across the college and compare between programs. We developed and piloted a survey within the self-study group and sent it out to all faculty teaching graduate courses. The survey which included both open-ended and closed items asked faculty to identify strengths and weaknesses in their students’ academic-writing skills and in their final projects or theses. When presented with the results of the instructor surveys, one faculty liaison pointed out the need to include student voices. Therefore, for three semesters we surveyed all students enrolled in thesis or project courses, asking them, too, to identify strengths and weaknesses in their preparation for academic writing.
The faculty and student survey questions (Appendix 1) were drawn from the four major sections of the rubric used by all faculty for the institution's master's-degree capstone project or thesis: (1) identifying the research question or problem, (2) conducting the literature review, (3) designing and evaluating the study and (4) using academic conventions.

We used descriptive statistics (frequencies and percentages) to analyse closed-ended items on the instructor (n=36) and student (n=140) surveys. We identified recurrent themes in the open-ended survey items. Finally, we looked for patterns within programs and across the institution.

**Results**

This self-study helped us identify three institutional problems in the College of Education:

- Difficulties synthesising theory and research,
- An imbalance between professional and academic writing and
- A discrepancy between the espoused and the enacted curriculum.

Students offered several suggestions for improvement, helping us formulate ways to address the problems in the future.

**Difficulties synthesising theory and research**

When asked to describe weaknesses in preparation for academic writing, teachers’ most frequent concern was the students’ demonstrable lack of critical-thinking skills. As the following comments from faculty reveal, the deficiency became glaringly apparent when students were asked to synthesise theory and research into a coherent literature review:

“The biggest hurdle seems to be identifying a theoretical perspective and then applying that perspective. I get the sense that many students find a bunch of research and then almost randomly try and tie it together rather than knowing how it fits into their overall theoretical perspective.”

“The students lack coherence in their writing/argument development.”

“[They seem unable to] truly synthesize the literature. Most simply summarize.”

“[Lack of] depth of critical thinking; [lack of] willingness to engage in the process of writing and rewriting.”

In their survey responses, students admitted that they lacked a clear understanding of how to write a literature review. However, their comments revealed a confusion about what was being asked of them and what the final product should look like, not a lack of ability or willingness to do the work. They reported that they had not been taught what they were being asked to produce. Thus, while faculty were displeased with the lack of critical-thinking skills exhibited by students, the students complained about the lack of opportunity in their graduate programs to develop those very skills:
“[Writing a literature review] is the area I felt I was least prepared for in my thesis. The structure was completely new to me and I struggled to get it off the ground because I had no idea how to formalize a literature review.”

“I didn't feel competent in doing a lit review. I feel like there was not enough preparation in a scientific and concise style of writing. Most of the writing that I have been doing has been opinion on some level, where this type of writing is very, very different.”

“[Better preparation would have been helpful for] Finding, synthesizing, and organizing related research findings.”

It is helpful to note, however, that although both faculty and students seemed concerned about weaknesses in critical-thinking skills, they were less concerned about weaknesses in the use of academic conventions. When asked about American Psychological Association (APA) style guidelines, for example, less than 5% of students voiced dissatisfaction with prior instruction or said that these guidelines had not been covered. Thus, the program was apparently addressing the structural aspects of academic writing (such as APA style), but not the critical-thinking skills required for synthesising research findings into a coherent literature review.

**Imbalance between professional and academic writing**

To verify student reports that academic-writing skills were, indeed, being neglected in the graduate program, we used our definitions of writing and syllabi provided by faculty to develop a curriculum map of written assignments in each of the institution's seven degree programs. The resulting matrix represented the percentage of assignments that addressed each type of writing in each of the programs.

We found that approximately 45% of students’ written assignments across all programs could be classified as professional writing. Examples of such assignments included lesson plans, curriculum development plans, advocacy letters and school-board reports. The next largest category was informal writing, which comprised 36% of all assignments; students prepared reflection papers, wrote in journals or shared thoughts on online discussion boards.

Only 19% of written assignments could be classified as academic and scholarly writing. Most of these took the form of literature reviews and position papers. To further verify this seeming paucity of academic-writing assignments, we examined the common student assessments required in all sections of each course. A similar imbalance was noted. Of approximately 100 major common assessments across all programs, 90% assessed students’ professional competencies; only 10% assessed academic and scholarly competencies. Among the latter, literature reviews and position papers were the most common. Examples of the former were thematic units, technology proposals, classroom management plans, professional development plans for probationary teachers and internship portfolios.

**Discrepancy between espoused and enacted curriculum**

We were aware that sometimes syllabi and course assignments capture only the formal portion of what goes on in a class. Therefore, in the surveys we asked the faculty and students whether
academic writing had been addressed in any way in either the emphasis or core courses. We found a discrepancy between faculty and student responses to this query:

- Sixty-seven percent of emphasis-area faculty claimed that their courses prepared students to identify a theoretical perspective; only 10% of students reported receiving any such instruction in these courses. In contrast, approximately 39% of students reported that they received this guidance in the core courses.

- Approximately 76% of emphasis-area instructors reported that their courses prepared students to synthesise information into a coherent literature review; only 9% of students concurred.

- Sixty-seven percent of instructors reported that the emphasis courses taught students how to think critically about the literature; only 9% of students agreed.

A troubling finding from the student responses was that approximately 22% of students felt they had received no guidance in identifying a theoretical perspective, and 18% felt that none of the courses had provided them with instruction in how to synthesise information into a coherent presentation. The following comments typify these responses:

“The most in-depth any of my courses got was an annotated bibliography. That's a great start, but to prepare and learn how to do a lit review . . . more needs to be there. Perhaps viewing and critiquing models would be best ahead of time. I'm a firm believer that it's hard to write something when one's never had exposure to the concept.”

“I spent the whole time developing units and lesson plans so when it came time for me to do a literature review, I had no idea what that was.”

Another troubling finding was the perception that students did not find academic writing very relevant to their role as practitioners, as this faculty comments:

“I think [our] students regard much of the writing they do as an isolated task that does not bear much relevance to their lives outside of their coursework.”

Student comments verified that they found academic writing less valuable than other activities:

“My program was very helpful to include courses like Finance and Law... which do not lend themselves to lengthy writing projects. I found these classes to be more beneficial than the classes where I had to complete these writing assignments.”

“I don't think it is relevant to my future. Writing a 30-page paper is not always teaching me how to be a better administrator.”

“As a [practitioner], there is [less] need for lengthy writing [than for] working together to solve a problem.”
Perhaps the most troubling faculty responses were those that pointed to some faculty members’ lack of overall knowledge about their curriculum. Depending on the skill to which they were responding, from 6% to 24% of faculty were not sure where students received preparation in academic writing in their degree program.

Finally, as the following comment reveals, some students believed that graduate classes should not have to address academic-writing skills:

“You either know how to write by now or you don’t. If you don’t, that’s why some of [the] tuition money goes to the writing center. Use it.”

**Student suggestions for improving graduate preparation**

In addition to asking students about the strengths and weakness of their graduate preparation for academic writing, we also asked them how we could improve the graduate program. Candid feedback from students provided us with some useful directions as we considered ways to address the identified gaps.

The literature review was, by far, the most frequently requested component students asked us to address. Based on the open-ended student comments in the survey, it also became apparent that, at least by the end of their degree, students had come to realise the importance of the theory-research-practice link:

“The section on theoretical background had me thinking back to classes I took long ago. A review of the different theorists/theories [from earlier classes] would have been helpful.”

In response to our query about areas where students wanted more preparation, every third or fourth comment recommended that we provide more guidance on how to find research and relate it to their theoretical perspectives. Above all, they wanted to know how to harness and synthesise the wealth of information they found, as indicated by these comments:

“[Identifying a] theoretical perspective was an area I was weak in.”

“I struggled most with the theoretical framework and background sections.”

Students were thoughtful and insightful in suggesting specific ways to restructure the courses. Their first request was to integrate research and theory with professional practice in each of the emphasis courses in their programs:

“It would have been better to have a chance to discuss possible topics stemming from course materials. For example, [in each course] we could have generated possible thesis/projects with that theme. We could have done a sample proposal for that topic . . . could have read another thesis/project on that topic. This could have been done in each class of our program. We could have been expected to identify the possibilities, even if we did not choose that option for our final thesis/project.”
A second suggestion offered by students had to do with course sequencing. Currently, the core research course must be taken before the capstone project or thesis, but it can be taken any time during a student’s program. Students repeatedly said how much they wished they had taken it earlier in the program sequence. Those who had taken it earlier suggested requiring it as the first class in the degree sequence:

“I think the research course would be more beneficial the very first semester. Much of what I learned there would have simplified and improved the projects I did in earlier courses.”

Finally, the current one-semester time constraint for completing the project or thesis came under criticism. This repeated complaint added force to the faculty’s own informal acknowledgement that quality was suffering under the existing arrangement:

“[One semester] is an unrealistic time frame to expect superior work.”

“It would be helpful to have the process of writing a thesis/project be longer than one semester, particularly given the limited preparation.”

“More time needed.”

**Discussion**

The purpose of this collaborative self-study was to examine how academic writing was being addressed in a college of education at a large Midwestern regional university in the United States. Like Uchiyama and Radin (2009), we found curriculum mapping to be a useful tool for identifying strengths and weaknesses in how we were addressing student scholarship. While our surveys indicated that emphasis-area faculty believed they were addressing academic-writing skills in their courses, the curriculum map proved otherwise. The matrix, based on curriculum documents provided by the faculty, clearly identified the lack of academic writing in six of the seven master’s-degree programs. This lack of attention to academic writing was also noted by the students. These findings offered evidence that, although we bemoan the quality of academic writing, “we seem to do little to address the quality of writing in a systematic way at the very point where scholarly style and identity is being shaped” (Rose & McClafferty 2001, p27). Even faculty who had been skeptical of the process of curriculum mapping acknowledged the benefits of the process once they saw the completed matrix.

Our findings also revealed, as cautioned by Bath et al. (2004), that students’ perceptions and experiences may differ from the perspectives reported by faculty. For example, while emphasis-area faculty reported that they were addressing theory, research and academic writing, students reported that they had received this instruction primarily in the core courses, not the emphasis courses. When presented with this information, some faculty suggested that as long as writing skills were being addressed in the core courses, perhaps they need not be addressed in the emphasis areas. Our faculty, like those elsewhere, seemed to assume that graduate students either already possessed the necessary writing skills or were being taught those skills somewhere else in their graduate program (Green & Bowser 2002; Gunn, Hearne & Sibthorpe 2011; McMillen, Garcia & Bolin 2010).
However, the research literature reveals a lack of conclusive evidence that generic skills like academic writing will automatically transfer from one course to others (Gunn, Hearne & Sibthorpe 2011). On the contrary, repeated application is necessary for metacognitive skills to transfer from one situation to another (Osman & Hannafin 1994). Academic-writing skills need to be integrated into the entire graduate program. Furthermore, certain academic-writing skills seem to be more commonly lacking than others, according to researchers. Howard, Serviss and Rodrigue (2010, p187) have concluded that students’ extensive use of direct quotations and “patchwriting”, in place of paraphrasing and summary, may call into question their understanding of the research.

The findings of this study also revealed that some instructors and their students believed academic writing was irrelevant to their role as practitioners. Such a separation of research and practice was noted many years ago by Schön (1983), who posited that professional knowledge is often presented within a hierarchy where “the researcher’s role is distinct from, and usually considered superior to, the role of the practitioner” (p26). However, this dichotomy has been challenged by those who argue that teachers should be partners in the creation of knowledge. They recognise that individuals “capable of locating, evaluating and utilizing quality information will be best positioned to problem solve and even lead in the workplace” (McMillen, Garcia & Bolin 2010, p428). Others (Smiles & Short 2006; Whitney 2009) have enumerated the professional benefits that accrue to teachers who possess the competencies inherent in academic writing.

**Conclusion**

This collaborative self-study helped us identify several problems with the process by which we were preparing students for academic writing at the master’s level. We realised that “to know is not enough”, and that we needed to be more effective in “the use of research to improve education” (AERA 2011, p198). After the program liaisons shared their findings with all faculty members, the faculty at our university’s College of Education have implemented the following changes:

- Each program has identified at least one course that will specifically address how to synthesise theory and research in an emphasis-specific literature review.
- Programs are strongly advising that the core courses be taken early in the degree.
- Most programs have identified a course where students will start to work on the development of a thesis proposal.
- The timespan for the capstone thesis has been expanded from one to two semesters.
- Programs are still exploring ways to embed theory, research and academic-writing skills throughout each course in the emphasis areas.

Our experience highlighted the fact that we cannot leave the development of graduate writing to chance. It needs to be infused into the curriculum, introduced early and revisited in more complex ways, as recommended in Bruner’s (1960) spiral curriculum. This project also highlighted the benefits of curriculum mapping, which can show gaps and redundancies in a program and illuminate opportunities to embed desired skills (Briggs 2007; Wiggins & McTighe 1998). Finally, this project illustrated how, through self-study, faculty can collaborate to diagnose and address gaps in curricula and instruction. For successful change to occur, it is vital that all involved share a
common understanding of the problem (Fullan 2001). This project helped our graduate faculty understand one another and the needs of our students, and thus develop a stronger sense of community. We believe that such collaboration can enhance both our own professional development as faculty members and the professional development of our students.

References


Appendix

Faculty prompt: Please indicate if and where you think your program prepares students with these skills prior to their final project/thesis.

Student prompt: Please indicate if and where in your program you received instruction in these skills.

Research Problem
a. Identifying a problem or research question
b. Stating a problem or question clearly
c. Writing a clear statement of purpose
d. Identifying a theoretical perspective

Literature Review
a. Synthesising information into a coherent presentation
b. Thinking analytically and critically about the literature
c. Using the literature to show the importance of a problem or question
d. Providing a rationale from the literature for the choice of method used to address a problem or question

Research Design
a. Identifying a design, subjects, sampling, instrumentation, procedures, etc.
b. Describing how projected findings could be analysed (for projects) or conducting precise and robust data analysis (for theses)
c. Determining evaluation criteria and providing reasonable conclusions and interpretations

Research Presentation
a. Demonstrating graduate-level writing, expression and organisation in at least one designated emphasis course
b. Adhering to APA citation and formatting guidelines

Instructor Survey: Open-Ended Items
a. What do you find to be students' main weakness(es) as they progress through ED 693/695?
b. What do you find to be students' main strength(s) as they progress through ED 693/695?

Student Survey: Open-Ended Items
a. Briefly describe the nature of writing instruction you have received in your graduate program.
b. For which aspect(s) of ED 693/695 were you well prepared?
c. For which aspect(s) of ED 693/695 would better preparation have been helpful?